INDIGNATION OVER THE REMARK AT-TRIBUTED TO COLONEL WARING.

UNION AND CONFEDERATE VETERANS CONDEMN THE UTTERANCE-NOTES FROM

THE POSTS. Nothing has occurred for years to so still the indignation of the men who fought the battles of 1881-1885 as the remark attributed to Commissioner George E. Waring, ir., of the Street Clean-ting Department, that he regarded the Grand Army buildings. As Miss Elizabeth Cavannah, the printing of the men who fought the battles schools are proud of their pupils, and are only too willing to show duly accredited visitors over their buildings. As Miss Elizabeth Cavannah, the printing of the men who fought the battles of 1881-1885 as the remark attributed to Commission of the men who fought the battles of 1881-1885 as the remark attributed to Commission of 1881-1885 as the remark attributed to Nothing has occurred for years to so stir the of the Republic as "a damned lot of drunken burns." This remark, it is alleged, was made at the offices of the Health Department on Friday last. President Charles G. Wilson, of that department; General Emmons Clark, the secretary; Health Commissioner Cyrus Edson, General O. H. La Grange, president of the Pire board, and Dr. Post, No. 307, being among those present. In a ducting an examination. The reporter made known statement, made public on Saturday, Commissioner Waring neither admitted nor denied having called Grand Army men "drunken bums," but acknowl-edged that he said that he "regarded the Grand Army of the Republic as a lot of pension burn

The Commissioner of Street Cleaning made the statement in criticising the act approved by Gov-ernor Morton last Thursday, which exempts veterans from Civil Service examination and gives them preference in State and municipal appointments, especially where the compensation does not exceed \$4 a day. Under this act Dr. Gibbs made an application to the Health Department for a reap atment as a medical inspector, and Colonel Waring, who happened to be present, took occasion to condemn the principle on which the act was based, a principle which has met the earnest and enthusiastic sanction of loyal and patriotic men without distinction of party.

Colonel Waring's remark was worse than the de moniacal exclamation of Poindexter Dunn, of Arkansas, two years ago." said a Grand Army man yesterday, who had been wounded at Gettysburg, "Duan was here serving on a Government com-"Dunn was here serving on mission when the decayed old building fell in Washington, killing and maining a large number of the clerks of the Pension Department employed there. 'Pity it hadn't been the pensioners instead of the poor clerks, said Dunn, when the news of the disaster reached the room where the commission

'Dunn was a badly reconstructed Arkansas rebel. and belonged to a party whose sympathies were not on the side of the Union. Little better was to been expected from him. Commissioner Waring claims the credit of having served in the Union Army, and to belong to the party which stood by the war and the soldiers who fought it to a finish. Besides, he is an officeholder under a Republican Mayor, I can think of no excuse that can be advanced for him. His published statement is evidence of a contemptuous hostility toward war veterans and at the same time a discreditable cor tempt for the law which he is sworn to observe and enforce that in my judgment units him for public office. An officeholder who cannot restrain his private sentiments when they conflict with the law of the State and of the Nation, ought to lose no time in returning to private life."

Condemnation of Colonel Waring's characteriza-tion of Grand Army men was not confined to the soldiers who wore the blue. Brave and gallant men who took their lives in their hands for the Confederacy were as emphatic in their denunciation of the uncalled-for expression.

"My observation satisfies me," said a member of the New-York Camp of Confederate Veterans, yesterday, "that Colonel Waring's remark was not only ungenerous, but it is untrue. I would like to see any fellow deliver himself of a similar slander against Confederate soldiers in a Southern city. Some of our veterans are receiving pensions under the laws of Southern States. It would be a sorry day for the man who would attack that policy down

There was a widespread feeling yesterday in favor of taking some proper notice of this matter, which was regarded as a sweeping slander of Grand Army men everywhere. Many comrades advocated a special meeting of the Memorial Committee These posts have their regular encampments this evening, and appropriate action of some sort is probable at most of them: Sumner, No. 24; Judson K.I. patrick, No. 143; E. D. Morgan, No. 307; Naval, No. 518, of this city, and Abel Smith, No. 435, and H. W. Beecher, No. 635, of Brooklyn.

Rear-Admiral Francis B. Allen, commanding the National Association of Naval Veterans, has di-rected a general canvass to enable him to determine approximately how many shipmates propose to at tend the National Encampment at Louisville, or September 9 to 14. Transportation rates have not been announced, but judging from past experience they will be a triffe less than one fare for the round trip, with privileges for side trips to adjacent batobjects of interest. As usual, free quarters will be furnished to shipmates requiring them, if sufficient notice is given to the local committee at Louisville. Names and addresses of the local committee will be given in future general

Grand Marshal E. P. Doherty will begin active preparations for the celebration of Memorial Day by establishing his headquarters next Wednesday at the Tist Regiment Armory, Thirty-fourth-st, and Park-ave. The grand marshal has detailed Colonel Abram L. Webber, of No 463 West Twenty-first-st, who is adjutant of William G. Mitchell Post, No. 539, as assistant adjutant-general. The work of getting ready for the parade of May 30 will go on un-interruptedly.

ting ready for the parade of May 30 will go on uninterruptedly.

Comrade E. G. Tuckerman, of Lafayette Post, No. 140, has given notice that the little blue book, containing the names of the commanders, adjutants and quartermasters of the different posts in New-York, Kings, Queens and Westchester counties, with the time and place of meetings, is now ready to be distributed to the posts. Each post can receive sufficient copies for every member, and can procure them on making application at the Baltimore and Oalo Baltiroad office, Canal-st, and Broadway.

Fifteen comrades formerly of E. D. Morgan Post, No. 25, were mustered in John A. Dix Post, No. 135, on Thursday evening. They made an imposing appearance as they marched in and were reolligated. They were Past Commanders Charles W. Spear, L. Freeland, A. Newberger, J. Swift and J. W. Gibbs and Gerard Bancker, L. Hurd, George W. Nostrand, F. W. Vandergrift, F. Bury Thomas D. Hankinson, Charles A. Swarthout, E. Martien, J. Woodruff and J. M. Johnson, Dix Post has been rapidly increasing in numbers in the last year, and carries some of the best soldiers in New-York on its rolls. The usual ceremony will be held on Memorial Day at the grave of General John A. Dix in Trinity Cemetery. The steamer Mattenwan will carry the comerces of the post and the invited guests to the pier adjoining the cemetery.

Fieet Paymaster Dustin has received many in-

the grave of General John A. Dix in Trimity the stery. The steamer Mattenwan will carry the comrades of the post and the invited guests to the pier adjoining the cemetery.

Freet Paymaster Dustin has received many inquiries for rank straps sultable for naval veterans, to be worn over the clasp or pinbar of the National badge. In response to numerous requests he has obtained designs for such straps patterned after the collar device on undress uniform worn by officers of the Navy of corresponding rank. The rank straps differ from any heretofore worn, in having an anchor and rank designation in appropriate place. The wearing of rank straps is recommended on account of its fliness and the fact that they are generally worn by other veteran organizations.

Another attempt will be made on Wednesday to have a meeting of the Soidlers' Monument Commission, which is empowered to fix the site and adopt plans for the \$256,600 arch or monument to be created in New-York in memory of the soidlers and saliors who lost their lives in the War of the Rebellion. The members of the commission are the Mayor, Recorder, Controller, Commissioner of Public Works, president of the Park Department and Comrade P. 8. Biglin, chairman of the Memorial Committee.

The members of the Soih Regiment Association will hold their twenty-fifth annual reunion and dinner on the evening of May 2s, at the Columbia, East Fourteenth-st. General Wardrupp, General Vicie and General Webber have signified their intention of being present, and the Boston contingent will attend in full numbers.

The thirty-fourth annual reunion of the 9th New-York Volunteers (Hawkins Zouaves) was celebrated on Friday evening at the Hotel Brunswick. About fort five of the "old Vets" were present, to gether with their old tattered and builet-riddled battle flags. Sergeant John T. Miller presided, Specches were made by Colonder Hawkins, Major Horner, the regiment; Captains Barnett, Curie and La Baire, Lieutenants Bartholome and dinter day and La Baire, the bill appropriating \$2,500

HOUSE FURNISHING

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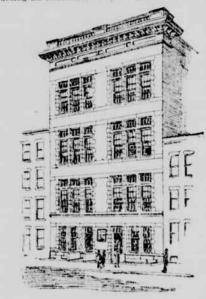
WATER FILTERS AND COOLERS, CEDAR AND CAMPHORWOOD CHESTS.



VISITORS NOT WELCOMED AT NO. 53.

SOME ACCOUNT OF MISS SALOME PURROY, THE TRINCIPAL-HER CAREER AS A TEACHER

-A SISTER OF HENRY D. PURROY. cipal of Grammar School No. 41, said; "Our only complaint is that the public does not take enough interest in our schools." But a remarkable exception to this usual desire on the part of the principal is Miss Salome Purroy, principal of Grammar School No. 21, in Seventy-ninth-st., between Thir1 and Second aves. When a Tribune reporter visited W. Gibbs, past commander of E. D. Morgan | that school recently he found Miss Purroy con-



GRAMMAR SCHOOL NO. 51.

would be willing to give a few minutes of that Purroy, however, replied with equal emphasi she should be busy all day.

Miss Purroy is believed by some of the pe

public-school circles to be a fairly good teacher

Purroy's promotion in the public school sys.

New York City has been rand. She studied
Normal School at Albany and in 18th beam
areer as a teacher in New York's public
s. In the short time of four years she was
a principal, and has served in that capacity
had formerly

D. K. L'S AT DINNER.

A JOLLY COMPANY AT THE FIFTH AVE. CLUB-HOUSE

Saturday night was a great night for "Dekea," By this word is meant the members of that success ful and progressive college fraternity, the Delta Kappa Epsilon, whose handsome clubhouse, at No 435 Fifth-ave, is well known Over one hundred members met there Saturday night to enjoy the tenth annual dinner of the club. Long tables decorated with flowers, stretched through the big rooms, college songs rent the air, and all of t were unhappy-that is, when separating came. John De Witt Warner presided ed at his table were F. D. Pavey, and H. N. Hyde of Yale College; Jarol Baldwin, Andrew W. Gleaso President Warner, Senator Calvin S. Brice, Charlto No outsiders were permitted to attend the july dis her, so the "Dekes" swapped sum had been raised for the refurnishing of the ciubbouse, and the men applauded. Then a quarte sang. When the quartet had ended their part of the programme the assembled men sang, and, the the unfortunate aeronaut who fell from his bullean that quartet "was not in it." Among those men that quartet "was not in it." Among those men that quartet "was not in it." Among those men that quartet "was not in it." Among those men that quartet "was not in it." Among those men that quartet "was not in it." Among those men that quartet "was not in it." Among these means to present were David R thus, for a farmer, R. L. Maynard, J. Anderson Hawes, from Jamin E. Hall, C. M. Rice, James W. Husted, R. D. Hyde, George F. Tucker, E. W. Forrest and W. R. Atkkins.

RECEPTION GIVEN BY SWISS RESIDENTS.

A reception was given Saturday night at the Teutonia Assembly Rooms, Sixteenth-st, and Thirdave., by a number of prominent Swiss re-identifor the women who gave their time and worked so for the women was a success of the Swiss fair, which closed on April 7. The attendance was large which closed of April 7. The attendince was large and the enthusiasm great. A number of articles which had not been sold during the fair were sold at excellent prices by auction including last night's sales the total amount realized will be, it is said, nearly 56,00. The object of the fair was to raise funds to build a Swiss Hail, a site for which will soon be rejected.

MAY RACE AT ST ASAPR AFTER MAY IL Washington, April 21.—"The Post" will say to-morrow that there is little doubt that an effort will be made to continue the meeting at St. Asaph after May 14, the date upon which the spring meeting ends. The big stables, it is reported, will go where the purses are larger, but there will be no lack of horses to compete for the money at St. Asaph, and, of course, there will be plenty of bookmakers.

BROOKLYN REPUBLICAN ENROLMENT.

At the meeting of the Brooklyn Young Republican Club to-night the importance of the next en-rolment of Republican voters in Kings County will be considered. This enrolment will take place in May. The club will urge, in benalf of good government, that all Republicans who have not y have enrolled see that their names are legal placed upon the rolls. This is the last opportunit to enroll before the coming elections. These elections are most important, as the delegates electe to the various conventions name the candidates.

THE RHEVOORT HOUSE WILL REMAIN OPEN. A deal was made Saturday whereby the Brevoort House passes into the hands of a new management, and the doors of this old hotel will remain open. The fate of this house has been hanging in the ance for two weeks while negotiations were being carried on between the owners of the property and

The Brevoort House is at Eighth-st, and Fifthave., and the ground on which the building stands is owned by the Sailors' Snug Harbor. The building is owned by a number of persons. Mrs. Clark, J. B. Hendrickson and Miss Sanders, of Philadel phia, are the main owners. They leased the ground for twenty-one years, and their lease does not expire until May 1, 1897. O. B. Libbey, the present proprietor, is a sub-tenant. His lease expires on May next. When it came to a question of renewal, Mr. Libbey did not feel that he could afford to pay the rent demanded and a controversy arose. Mr. Lib-bey said that with the graind rent, the taxes and insurance, he had as much as he could carry. He owned a three-quarters interest in all the furniture in the building. When no agreement could be arrived at, it was decided to sell the furniture at nuction and a sale was advertised to take place next Monday. Yesterday the owners of the building purchased outright Mrs. Libbey's interest in the furniture, and thereby secured entire control of the niture, and thereby secured entire control of the house. Instead of closing it, as was announced, the hote; will be improved and conducted under the management of the owners of the building after May 1. rent demanded and a controversy arose, Mr. Lib-

SUPPER IN THE INTERESTS OF LAROR.

The Church Association for the Advancement of the Interests of Labor will have a supper at Cathedral Mission House, No. 120 Stanton-st. Monday evening, April 29. After supper speeches upon economic problems will be made by the members and also by delegates from the Church Club, Church Social Union, Workingwoman's Society, Social Reform Club, University and College Settlements and King's Daughters. Tickets, 25 cents, may be obtained from the Rev. Joseph Reynolds, No. 338 Alextained from the Rev. Useph Reynolds, No. 338 Alextained from the Rev. Useph Reynolds, No. 338 Alextained from the Rev. W. E. Johnson, Church of the



as if people needing carpets can't help buying from us. Even if our prices are much lower than elsewhere. we keep up qualities to the highest standard.

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SI. MARK'S CHURCH CENTENNIAL.

DOTH ANNIVERSARY OF THE LAYING OF

Day, was faid the cornerstone of St. Mark's Church, the famous old East Side church at Second-ave and Tenth st. It was though had formerly been a part of the fart; of old Peter Stuyyesant. It was built on a piot formerly of Governor Stuyverant had built at his own expense

com al.

St. Mark's Church is left, and in the future will more and more left, in a somewhat socially sole-tried section of the edy. To live south of Four-inthist, to-day involves risk to social regulation, it never I trust, will those put in control of its stiny hereafter be guilty of the recreancy of folying wealth into its secluded seats, abandoning e-work of preaching the dospet to the poor, forking the spot that has been hallowed by memory and associations reaching back over 250 years.

BOTH PRISONER AND COMPLAINANT.

EXTAMIN WOOD, MANAGER OF THE LOUIS, AR

ESTATE, APPEARS IN DEFFERSON MARKET.

Benjamin Wood, of No. 18 East Forty-fourth-st. who said that he was the manager of the Lordlard estate, with an office at No. 2 Mercer-st., appeared in the Jefferson Market Police Court yes terday morning as a prisoner and as a com-plainant. Policeman Huise, of the West Thirrieth sat station, saw Wood standing in front of the Mariborough Hotel, at Broadway and Thirty-sixth-

riborough Hotel, at Broadway and Thirty-sixtu-yesterday morning, at 5 o'clock, quarreding h a woman whom he accused of robbing him ise took them both into custody. At the station-ise Wood said that he had met the woman or street and had driven around with her in a . He declared that she had robbed him of a d watch and chain and \$5. The watch Hulse nd on the sidewalk near the woman when he ested her. The woman gave her name as Kat-urren, forty-three years old, of No 208 West rechiticals.

Forty-third-st.

In the Jefferson Market Court Justice Simms held the woman in \$1,000 for trial and discharged. Wood on the statement of Hulse, who said that he had locked the man up more to secure his presence in court than because he was intoxicated. Wood hurried out of court.

ST. THOMAS'S CHAPEL CONSECRATED.

The new Chapel of St. Thomas, in East Sixtleth-st. near Third-ave, which was cently erected on the site of the old building, cently erected on the sate of the coat of \$30,000, was consecrated yesterday morning by Bishop Potter. The chapel is the gift of Mrs. A. A. Linsly, No. 6 West Fiftlethest, to the trustees of St. Thomas's Church, Fifth-ave, and Fiftythird-st., in memory of her son, to carry on mis-sionary work on the East Side. The chapel has frontage on West Sixieth-st, of 75 feet, with a depth of E0 feet, including the vestry and schools in the rear. It is a handsome Gothic structure of brick, with stone trimmings. The interior of the building is likeled by ten stained gass windows. The roof is panelled with oak, and the chancel addes and baptistry are handsomely finished.

There is a handsome memorial stained glass windows over the sanctuary, representing Christ in the Temple, presented by Mrs. Richard Arnold, and a memoria, window representing the Annunctation, in one of the addes, presented by Hobert Gelssler, Among these present at the consecration services were ex-Governor Reswell P. Flower, the Rev. Dr. John W. Brown, the Rev. W. A. Fott, the Rev. Mr. Nelson, formerly of Grave Church; the Rev. Mr. Gibson, the Rev. John W. Browne, rector of the parish, the Rev. Nathan Seagie, James Pott, Henry J. Burchell, Robert B. Dobson, Lanadale Boardman, John T. Alterbury, George E. Steiman, Courtaind E. Hastings, William Fahnestock, John V. Brower and Edward A. Le Roy. lepth of 150 fect, including the vestry and school

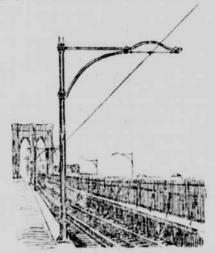
ANOTHER FOOD SHOW OPENED.

At the Grand Central Palace, at Lexington-ave and Forty-third-st., the National Food and Industrial Exposition is open from 2 in the afternoon until 10:30 at night, Sundays excepted. The entire main floor of the big building is occupied, and

LIGHTING THE BROOKLYN BRIDGE CARS. SOME NOVEL APPLIANCES-A ROLLING-BAR TROL-

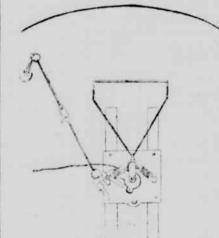
LEY-SLIP JOINTS IN A WIRE. The work of lighting a moving car with electricity is attended with difficulties not experienced in ap-plying the same system of illumination to a stationary structure. An incandescent burner, like an invading army, must always maintain a constant connection with its base of supplies. On some steam roads, by way of experiment, the base of supplies has been carried along with the train. That is to say, generators have been operated by the car axle of by steam drawn from the locomotive. Storage batteries, to hold a reserve of electricity, are a necessary accompaniment of this plan, and room therefor is easily obtained in the baggage car. On streetcar lines which employ electricity for motive is an easy matter to divert the small amount of current necessary for lighting fro supply taken off the overhead wire through the trolley wheel and pole. But electric lighting on a cable road is quite another matter. Hence the attempt to light the cars on the Brooklyn Bridge in this manner, an attempt recently crowned with highly gratifying success, possesses peculiar interest. It has required the use of some unique appa-

In the main, the plan adopted resembles the familiar trolley system. There is a bare copper wire suspended above each track, and elaborately in-sulated from the supports, From the dynamos in the power-house over in Brooklyn the current is led to the centre of the bridge through a feeding cable, which there divides into two branches, one



i done its work, it is led down through wires and

this limitation, of course, determined the height of he wire out on the open approaches, where, how



r jumps the wire under any provocation what and an unfailing supply of electricity is con heted down to the lamps.
It is not necessary, of course, to have the roller

ouch the wire except at night. On the other hand, i is better to avoid needless friction. At all times the triangular device maintains a nearly horizon-tal position, but it is lowered a little by dio. Then when the hour for lighting up arrives, each train-man pulls a lever on the end of one car, and thus operates beli-cranks and a connecting-rod on the roof, which lift the trolley into contact with the

ley trail, no matter in which direction the vehicle to which it is attached is moving. On an electric ir the pole and wheel are shifted by hand, at the nd of the line. But this lighting trolley on the Bridge cars is tripped and reversed automatically while trains are being switched, by means of a simrigid frame extending downward about ten inches from the overhead wire, and suitably placed

An important and unusual, if not entirely novel, feature of the Bridge lighting system is that the cars are electrically as well as mechanically coupled together, so that, even if the trolleys of three cars in a train got out of order, the one on the fourth would light the others. Such an arrangement, moreover, utterly precludes any flickerng when the trains are being switched at terminal

Still another curious and necessary part of the equipment deserves mention. In each of the three



suspension spans of the bridge there is a "slip joint," covering a gap from eight to eighteen inches wide, to allow for the expansion and contraction caused by temperature changes. At these points a sup joint is made in the overhead wires also. This consists of a brass rod, a trifle smaller than the opper conductor, sliding in and out of a brass tube little larger. The difference in size is so insignificant that one can discover the joint only on close inspection. For various reasons, however, it is destrable to keep a trolley wire tast. The linemen who put it up subject it to a great strain. Now unless special precautions were taken to anchor this Bridge wire on each side of a slide joint, the a would be enough to pull the latter open. At other points the trolley wire is attached to the ension wire by means of a narrow copper saddle or U-shaped strip. But here, about six or

> " " money. "strength. The wisest woman saves all She uses Pearline.

Some women save their time.

GRAND ARMY BUGLE NOTES. NEW-YORK'S PUBLIC SCHOOLS. SCIENCE AND MECHANICS. Science in each side of the joint, the wire is range the coloring matter in parallel lines, and to this device are rove small wire cables which are

ing wires. Much ingenuity has been exercised in designing the Bridge trolley. Several features of it are original, and the mechanism is the product of much in-ventive skill and extended experiment. Although the device was supplied by a firm of electrical and mechanical engineers which supplied the other parts of the electrical equipment, and of which J. H. Vail is the president, many of the ideas adopted were conceived by A. E. Winchester, a member of the same partnership. Residents of New-York and Brooklyn who have occasion to cross the Bridge at night are now so captivated by the beautiful results of this undertaking that they are asking why the same lighting system cannot also be applied to the elevated railroads of both cities.

THE ANIMAL VIEWED AS AN ENGINE. WHAT MAY BE GAINED BY STUDYING ITS GREAT

EFFICIENCY. One of the greatest problems to which the atten tion of modern experts in mechanical engineering has been directed is this: How shall a larger proportion of the energy known to be stored in fuel be obtained for industrial purposes? Enormous waste attends every process of conversion into mechanical power yet tried. The problem has been attacked on a new side and in an interesting manner by Professor R. H. Thurston, of Cornell University, one of the highest American authorities in this department of science. In animals and man we see substances containing very much the same themical elements as coal taken into the system, subjected to processes resembling combustion, and finally imparting strength wherewith a certain work is done. Careful investigation shows that the best steam-engines show an efficiency of only 20 per cent; that is to say, the actual work performed by them under the most favorable circumstances is just that fraction of favorable circumstances is just that the possible power represented by the heat which is taken into the water from the furnace. But in the human machine about 23½ per cent of the in the human machine about 222 per cent of the energy latent in the average food supply is realized in the day's work of an active laboring man. The filternal operation of the system, circulating the blood, pumping air into and out of the lungs, and performing other labors, may perhaps double this estimate, Professor Thurston says, while if the output of nerve and brain power be included in the calculation, perhaps the total efficiency would be between 50 and 60 per cent. This is nearly three times the best showing of a steam motor. mysteries involved in this superiority, therefore, may well tempt the keenest and ablest engineers strongly than the physiologist to further in-

There are recognized in the arts only three methelectricity and by chemical action. Professor Thurston shows at great length that the vital mahine is not a heat motor. Upon this point he has no doubt. Though instructions are sent through nerves of a highly organized animal to its muscles by what seems to be an electric current, this latter performs but an insignificant amount of physical labor. And in man and the horse, for instance, there are no special organs for the produc tion of electricity as in the electric eel. Hence it eems highly unlikely that the animal is an electrodynamic machine. But its similarity to a chemical dynamic motor is obvious. In the particular muscle omething, fats and glucose which have been stored The phenomenon is akin to the firing of an explosive in a distant mine with an electric current. The power in every case seems to be manufactured on the spot, and not to be transmitted from a central station. Each organ and cell, then is a motor by itself. Further evidence that the nerve-impulse may be electric is found in the fact that a real electric current can be made to produce ntical effect upon the muscles. Nerve energy, like brain power, is subject to exhaustion, and appears to be derived in some way from the daily ood, although its source and the method of its development cannot be detected. But inquiry on that oint, fascinating and important as it must be to the biologist, the physician and every promoter of the highest civilization, is not likely to yield resuits of such practical value as the solution of anstarches into carbon di-oxide and water, which accompanies muscular action, a direct or indirect change? If this secret could be revealed and applied to industrial uses successfully, a tremendous dution would be wrought in mechanical engi-

ILLUSTRATION BY COLOR PHOTOGRAPHY. ADAPTING THE "SINGLE-SCREEN" PROCESS TO

A sudden and mysterious change, as wonderful as of Herrmann's transformations, was wrought in a photograph which a visitor to The Tribune litorial rooms was showing a few days ago. had a small black-and-white transparency, on a measuring 4 by 5 inches, and representing, with about the accuracy one would expect from an ordi-city camera, a Japanese screen. The original, howver, had patches of red, pink, yellow, green and purple, on its surface, and though the figures and forms were reproduced correctly, this coloring was entirely lacking in the picture. The exhibitor also had a thin sheet of transparent celluloid, of the dimensions as the glass. If you held it up to the lifet, it appeared devote of color, although upon esequent examination with reflected light it was opened on a clear sky, and the uppermost film was slowly shifted about by the operator's thumbs. Then, all at once, the picture took on the appear ance of a crazy quilt, and after a few seconds reealed with approximate fidelity the colors of the Japanese importation. The celluloid was removed. and presto' the transparency was reduced to its former monochromatic condition. The means by ustrial applications in the near future.

In the attempts which have been made photographically to reproduce the colors of objects, several different methods have been employed. None of these have been attended with entire suc-But the principle which, up to the present time, has yielded the best practical results, If three separate pictures be taken, through glass or liquid screeus of different and scientifically se lected colors, and these be used as transparencies in combination with the same or similar they may be merged in one which will bossess substantially correct hues. At first, these blackand-white transparent prints were placed side by side, but adjusted so that the light rays coming through the three (and their colored covers) would converge and unite. The observer looked, either into a special instrument whose eye-plece was in the focus of these rays, or else at a white surface on which they fell, accurately superposing one picture upon another. This could be done admirably with a triple magic-lantern in a dark room Later the prints were made on sheets of gelatine which were dyed, each of the three with the color of the screen under which it was originally taken. These pictures were laid, one on top of the other. and a simple lantern and lantern-slide were used in projecting the image. This plan did not give as sharp outlines as could be desired, but its possi-bilities have not been exhausted yet, perhaps. The three-plate photographic system has also been extended to chromo-lithography during the last few years, and it is now practicable to multiply, with camera, press, ink and paper, tolerable likenesses of fruit, flower, natural scenery, oil paintings and Turkish rugs. But these pictures are more ing for what they are likely to lead to than for what they really are. interesting attempt to simplify this general method was announced in The Tribune a few

months ago. It was proposed to get along with one color screen, both in the camera and afterward in exhibiting the picture, and this meant, of course only one negative and one positive. The screen, however, was to be a composite, and bear the same three colors (orange-red, green and violet-blue) as before. These were not mixed in advance, nor spread over each other on the glass, but distributed over the surface in fine lines or minute specks. When the first public announcement of this plan was made, the credit of it was given to a Dublin experimenter, Professor Joly, It appears, however, that as long ago as April, 1892, James W. McDonough, of Chicago, who has been conspicuous as one of the inventors of the telephone received a patent embodying the essential principle His method was to scatter fine particles of colored glass or other transparent material upon a sticky surface in order to coat his plate, and he applied the coloring directly to the sensitive film. It is possible that Joly may have been the first to ar-

secured to a hanger such as is represented in the have put them on a separate sheet of glass in-third illustration. Through eyes in the ends of stead of on the photographic film; but he probably this device are rove small wire cables which are secured to the Bridge framework and are tightened bination of colors in a single plate. However this by means of "turnbuckles." The opening and may be, Mr. McDonough seems to have gone much closing of those three gaps in the great structure, further than any one else in adapting the single-therefore, does not affect the tension of the light-screen process to the illustration of books and magazines, which are printed on slow presses. He was the clever prestidigitator whose trick was described at the beginning of this article. It is hardly neces-sary to add that the celluloid sheet which was laid over the photograph in that experiment had previously been covered with colored lines, and that his transparency was obtained from a negative taken under a similar screen; and it was only when the red lines on the celluloid exactly covered the portions that were photographed under red, and green lay over what was taken under green, and blue over blue, that the observed color effect flashed out into visibility.

This industrious and skilful genius has found a way to rule straight parallel lines, in colored inks or pigments, upon a smooth surface, so evenly and regularly that he actually gets 300 to the inch, and he claims that he can double the number. This enables him to put a red line, a green line wind a blue line side by side within each one-hundredth or two-hundredth of an inch. The ruling extends in the same succession across the whole area; the same intensity of his prevails everywhere, and the distribution in point of distance is mathematically correct. As a consequence of all this precision, the colors blend sufficiently to deceive the thus treated is practically colorless by transmitted light, and has only a slight iridescent appearance in reflected light. And on opaque white paper, similarly printed, the casual observer would find no evidence of the change, except, perhaps, a faint grayish tinge. But if a photograph obtained under a screen ruled in precisely the same manner should be transferred to a block, and the latter be used to print, with black ink, on this specially prepared paper, Mr. McDonough believes that he would get on the page a picture as faithfully representing the colors of the original as he does in the trans-It would be necessary that the block should "register" accurately that is, the parts of the photograph taken under red lines should exactly coincide with the red lines on the printed actiy coincide with the red lines of the paper, and so on. This needs a very delicate adjustment, but Mr. McDonough believes it practicable. On first thought one would say that the black image should be seen through the colored lines, and hence that the latter should be printed on a sheet after, rather than before, the impression had been left by the photographic block, thony's Bulletin," in a recent refer thony's Bulletin," in a recent reference to the matter, assumes the feasibility of getting the desired effect with paper ruled in advance. Already it is possible to reproduce photographs in book work by the "half-tone" process. If Mr. McDonough's dream is realized, a good printer with a slow press will give to such reproductions the true coloring of Nature!

It ought to be added, however, that just as in the three or four screen processes, so in the single-screen method, the hues finally exhibited correspond to those of the original only in a general way, and not with absolute precision; and for the attainment of perfection in this respect we may be obliged to wait a while longer. At present, it is impossible to say whether or not, in his simplified system of book illustration, Mr. McDonough will get any nearer to the goal, but his efforts to do so will be eagerly watched by photographers, artists, publishers and scientists.

APPLICATIONS OF ELECTRICITY.

A London restaurant uses an electrically heated plate to keep one's food warm. So long as the cur-rent is turned on one can dine in as leisurely a way as he likes. There is no danger of receiving a shock from touching the plate.

The first of the 5,000 horsepower generators of the Ningara Falls Power Company, having been set up and connected to its turbine shaft, was made to and connected to its turbine shaft, was made to rotate a few days ago for test purposes. Everything worked well, Besides its canal and outlet tunnel on the American side, with a capacity of over 160.00 horsepower, the company just mentioned has privileges over in Canada which when developed will yield twice as much more. A rival corporation on the New-York side has also extensive plans for generating power there. And now it is announced that Leonard Henkle, of Rochester, N. Y., who caims to have been the first to suggest this use of the Falls, is trying to get up a third organization of capitalists for a similar purpose. A gigantic schime, utterly eclipsing the others in proportions, is projected, and elaborate details are supplied for popular consumption, but the announcement looks like a stock market rumor.

An Englishman has a special wire connected with

An Englishman has a special wire connected with end a heating current to his frozen water-pipes and thaw them out. They never have such a freeze avenue for the "right little, tight little isle" as we lo her but the plan might be made to work in America.

The French physician, D'Arsonval, who has exerimented extensively with electricity for curative purposes, finds alternating currents of high frequency the most seviceable. He claims that they stimulate the activity of protoplasm, promote the elimination of urea and carbonic acid gas, increase the con-sumption of oxygen, and thus quicken every vital function. He believes that such treatment is espe-

In foundries it is customary to immerse castings in a bath of dilute sulphuric or nitric acid, in order to remove burnt sand and scale. This process is to remove burnt sand and scale. This process is known as "picking." The furnes from the acid render this method of cleaning the metal very offensive. Many attempts to use electricity as a substitute have been made, but without success until recently. A plan invented by Dr. A. H. Ikamage, of Edinburgh, is now in use in a wire mill near Chicago, and proves a great success. The objects to be picked are attached to the onode, or positive pole, which, with the negative pole, is immersed in a solution of some sait of iron not named. Electrolysis results, and the iron taken off the pickled rods is deposited on the cathode.

The proposal dam against the Nils at the extractive

The proposed dam across the Nile at the cataracts, for purposes of irrigation, has already been men-tioned in The Tribune. It is now suggested that water enough to generate 40,000 horse-power might also be obtained there, and by transmitting the lat-ter electrically to more than a hundred cotton mills an immense industry could be built up.

In some new shops just erected by the Westinghouse people at Brinton, Penn., all the machinery is to be driven by electricity. Tesla's two-phase is to be driven by electricity. Itsia's involvables system is to be used there. At present thirty-seven motors, ranging from ten to seventy-five horse-power in capacity, and having an aggregate capacity of 939 horse-power, are in operation; and sixteen more, with a capacity of 1,339 horse-power, will soon he added. Besides all these. Teela's alternators will be substituted for some old direct current machines temporarily retained.

On a large estate in Moravia (Austria) last sum mer a planting mill, grist mill, three farms and dairy were supplied with electricity from one sta-tion. The planer was driven by this power alone. Grinding was done by water-power most of time, and the electric motor came into use only in emergencies. In the dairy a ten horsepower motor emergencies. In the dairy a ten horsepower motor operated several pumps and some small apparatus. Each of the farms had a twelve horsepower motor, mounted on a truck and housed, and moved about from place to place, to drive pumps, threshing machines and other things. The power circuits were carried through the fields on pole dines in the convenional way, and the electric motors could be connected up at any point where their service was required. The plant was set up by a big firm in fludapest for advertising purposes, but showed some of the countless uses to which electricity can be devoted in rural regions.

TO DISCUSS THE SCHOOL BILL. Women's Association for Improving Public Schools invite the public school teachers to meet at the City College to-morrow, at + p. m., to hear the pending School Reform bill discussed. Addresses the pending Schol Recommendation of the delivered by F. Ellery Anderson, School Commissioner Charles B. Hubbell, Payson Merrill and James B. Reynolds, trustee in the Twenty-dirs and Tenth Warls, and others. Dr. Thomas Hunter, one of the framers of the original bill, has also been invited to be present and speak.

THE BATTLE OF LEXINGTON COMMEMORATED The General Society of the Daughters of the Revolution celebrated the 120th anniversary of the battle of Lexington by a luncheon at the Waldorf on Friday. The luncheon was served in the white and gold day. The luncheon was cerved in the white and gold ballroom and covers were laid for 120 guests. When coffee had been served, Mrs. Edward Paulet Steers, president-general, made a graceful address of wel-come and then introduced the Rev. Charles E. Brug-ier, chaplain of the Continental Chapter, D. R., who responded to the toast, "The Lexington Aarm," Miss Adaline W. Sterling, State Historian, New-Jersey Society, D. R., replied to the toast, "The First Battle of the Revolution." The ceremonies closed with singing "The Star Spangled Banner,"

SMITH COLLEGE ALUMNAE TO GIVE A PLAT. The New-York Association of Smith College nnae will give two dramatic entertainments for the benefit of the College Library Fund, next Friday evening and Saturday afternoon, at Berkeley Lyceum. The play to be presented in "Pygmallon and Galatea." Among the patrone are Mrs. Seth Low, Mrs. Russell Sage, Mrs. Lau-rence Hutton, Mrs. William H. Kipp, Mrs. Wellam G. Choate, Mrs. Charles J. Gould, Mrs. Richard Smith, jr., Mrs. Marshall Ayres, Mrs. W. Crittenden Adams and Mrs. Percival Chubb.

Gifts for Easter Weddings In Great Abundance at

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